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(54) Title: ARABIDOPSIS THALIANA DERIVED FRIGIDA GENE CONFERRING LATE FLOWERING

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1  MSNNPPPTVAA QPTTTANPLL QRHQSEQRRLR ELFKIVETTES TSMDITIQGS
51  EKQPQFLKSID ELAAFPVAVE TFKRQFDDQL KHIESIENAI DSKLLENSGVV
101  LAARDNNRNHQ PMLSPPRNVN SVETVTVSQ PSQSVIPETG NKPEGGRMCE
151  LMCSKGILRKV IVANISDQAK LMEEIPSALK LAKEPAKFVL DCIGKHYLOG
201  RAPFTKESPM SSSAROVSLII LESFLLMPDR GKXKVXIESK IKDEAETRAAV
251  AMRKRLMTEG GLAALAEKMDA RGLLLRLVACF GPVSNFRSTL LLDLIRMSGS
301  NEIAJGALKRS QFLVLMVMSGI VESSIKROMI IEALEMVTTT GMEDIFSAAL
351  VLTSPFLKMSK EFSERAKKA QSPLAFKEMV TKQLAVLSSV HQCMETHKLQ
401  PAKELPGHQI KEQIVSLEKD TQLDKEMEE KARSLSLMEE AALANKMYNQ
451  QKHEPHPLSPM EMPPVTSSSY SPYTDQREFF SQRDQDGQEI SALVJSYLGQ
501  STSFPHRSRR SPEYMVPLPH GGGLGRSVYAY EHLAPNSYSP GHGHRIMHQY
551  SPSLVHGCRR PLQYSPPING QQQLPYGIQR VYRHSPGEER YLGLSNQRSP
601  RSNESSLDPK

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(57) Abstract: Disclosed are isolated nucleic acids obtainable from the FRI locus of plants which encode polypeptides capable of specifically altering, particularly delaying, the flowering time of a plant into which the nucleic acid is introduced. One preferred embodiment is the FRI nucleotide sequence which encodes the polypeptide of Fig 6 (see the sequence of Fig 5, particularly bases 362-2188 thereof) or sequences degeneratively equivalent to these. Also provided are variant sequences (e.g. alleles, orthologues, derivatives) and complementary sequences, plus vectors, host cells, plants and associated processes of production and methods of use e.g. for influencing or affecting flowering time in a plant by expression or suppression of FRI or variant sequences.

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